

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-16 (Canceled).

17. (Previously presented) A hybrid fragment of tetanus toxin comprising a fragment C and a fragment B or a fraction of fragment B having at least 11 amino acid residues, wherein the hybrid fragment is capable of transferring *in vivo* a protein, a peptide, or a polynucleotide through a neuromuscular junction and at least one synapse.

18. (Previously presented) A hybrid fragment of tetanus toxin comprising a fragment C and a fragment B or a fraction of fragment B having at least 11 amino acid residues and a fraction of a fragment A devoid of its toxic activity corresponding to the proteolytic domain having a zinc-binding motif located in the central part of the chain between amino acids 225 and 245, wherein the hybrid fragment is capable of transferring *in vivo* a protein, a peptide or a polynucleotide through a neuromuscular junction and at least one synapse.

Claims 19-20 (Canceled)

21. (Previously presented) A composition containing an active molecule in association with a hybrid fragment of tetanus toxin according to claim 17.

22. (Original) The composition according to claim 21, wherein the active molecule is selected from the group consisting of protein SMN, BDNF (brain-derived

neurotrophic factor), NT-3, NT-4/5, GDNF (Glial cell-line derived neurotrophic factor), IGF (Insulin-like growth factor), PNI (protease nexin I), SP13 (Serine Protease Inhibitor protein), ICE, Bcl-2, GFP (green fluorescent protein), endonucleases like I-SceI or CRE, antibodies or drugs specifically directed against neurodegenerative diseases such as latero spinal amyotrophy (LSA).

23. (Previously presented) The composition according to claim 21, wherein the active molecule is a polynucleotide encoding a protein.

Claims 24-33 (Canceled).

34. (Previously presented) The composition according to claim 23, wherein the polynucleotide further comprises a promoter capable of expression in neurons.

35. (Previously presented) The composition according to claim 34, wherein the polynucleotide further comprises an enhancer.